COMMENTS BY THE AMERICAN CHEMISTRY COUNCIL ON THE JANUARY 12, 2005 FORMAL PROPOSAL OF A REVISED AIR TOXICS REGULATORY PROGRAM BY THE LOUISVILLE METRO AIR POLLUTION CONTROL BOARD

(SUBMITTED FEBRUARY 14, 2005)

The American Chemistry Council (ACC) appreciates this opportunity to submit comments on the following proposed regulations, collectively referred to as the STAR Proposal: Regulations 1.02, 1.06, 1.07, 1.20, 1.21, 2.02, 2.08, 3.01, 5.01, 5.11, 5.12, 5.20, 5.21, 5.22, 5.23, and 5.30.

While the ACC understands the Louisville Metro Air Pollution Control District Board's (LMAPCDB) desire to address the ongoing concern over potentially unhealthy air in its city, we are concerned that the LMAPCDB is moving forward with a plan that will pose a significant adverse economic impact on area business while making no demonstrable difference in the potential risk targeted by this rule. In fact, LMAPCDB apparently ignores the fact that a variety of different sources may be contributing emissions of air toxics in Louisville, and that a comprehensive approach to managing any potential risk from these emissions is the only reasonable means of addressing LMAPCDB's concerns. While major stationary sources may seem a natural and sufficient target, the LMAPCDB serves its constituency best by acknowledging all contributions to any potential risk problems and addressing them all in an equitable and cost-effective manner. The STAR proposal fails to meet this goal.

ACC members are proud of the dramatic reductions of hazardous air pollutant emissions they have made in recent years. The federal EPA's latest Toxic Release Inventory highlights that chemical industry emissions are down 74% since 1988. In addition, emission reductions will continue as more federal regulations currently in the pipeline will ensure that approximately 40 additional source categories of industries will be making substantial reductions in the next 1 to 2 years. And even as the last of these control technology programs are being completed, ACC and other industry groups are working with the EPA to develop risk-based standards (Clean Air Act §112(f) residual

risk) that will address the remaining unacceptable risk from major stationary sources. The overall effect of these initiatives is to continue to drive down emissions and risk from the major stationary sources. Absent analysis that shows substantial risk remaining after these federal programs take effect, the LMAPCDB's proposed regulation is duplicative and, therefore, unnecessary.

EPA is currently evaluating whether residual risks remain from the chemical industry since the application of Maximum Achievable Control Technologies (MACT). EPA's screening analysis of the Hazardous Organic NESHAP (HON) source category indicates that few unacceptable risks remain either nationally, or at the regional and local level. EPA's analysis indicates that fewer than six units may even pose a risk greater than 10^{-4} and almost half the category pose risk below 10^{-6}. This strongly suggests that these sources not driving any potential air toxics risk problem in Louisville or other parts of the country.

In fact, as EPA is evaluating options for reducing potential risks from these facilities, they are finding limited cost-effective control technology that will make an appreciable difference. EPA, like the LMAPCDB, has evaluated leak detection and repair (LDAR) programs. EPA has determined that where residual risk does remain at facilities, it results mainly from leaking components, and has been unable to develop enhanced LDAR approaches that would measurably reduce risk in a cost effective manner. What the Agency did learn was that ratcheting down LDAR requirements without being able to accurately measure any risk reduction would result in costs to the facilities of approximately $100,000 per ton removed, but with little to no confidence that residual risk would be reduced.

EPA is required to issue a proposed residual risk rule by the end of 2005 and a final rule by the end of 2006. While ACC does not believe that the LMAPCDB rule is necessary or appropriate given EPA's ongoing efforts, we strongly recommend that if LMAPCDB continues its efforts, that it at least closely coordinate this work with EPA's residual risk rules to minimize the potential resulting burden of two sets of risk-based requirements being imposed on these sources by different regulatory agencies.

The LMAPCDB proposes a number of changes to the start-up, shutdown and malfunction plans (SSMP) that all facilities use. While ACC recognizes the LMAPCDB's legitimate concern about emissions that occur during a malfunction, the very nature of a "malfunction" makes these events difficult to define. Parameters that assure good pollution control practices are being followed and are a cornerstone of the federal Part 63 General Provisions. Under current federal regulations, sources are required to operate their facilities during SSMP events in a manner that minimizes their emissions. In writing the existing SSMP requirements, EPA recognized that a prescriptive approach, which might initially appear to provide a driving force to minimize emissions, would in many instances require facility operators to take actions that might put their facilities at risk, and hence the neighboring population. EPA correctly chose to imbed the goal in the regulations-minimize the SSMP emissions-and allow each owner/operator to tailor its SSMP to its own process. Sources need assurances that when a "malfunction" occurs, they will not be subject to enforcement for these unexpected events that are outside normal operating conditions. State and federal tracking and evaluation of unusual trends, frequency or other anomalies of SSMPs already exist, and if a regulatory authority believes that something out of the ordinary in a particular facility SSMP needs additional scrutiny, it has the ability to pursue it. Any attempt by LMAPCDB to further define these emergency (upset) conditions undermines the ability of the facility to safely operate under an SSMP.

LMAPCDB also proposes some risk provisions that are overly conservative, and are of significant concern from both a scientific and regulatory perspective. For example, the proposed rule requires facilities to use unit risk estimates from a hierarchy of databases, in which EPA's integrated Risk Information System (IRIS) is the primary source. Because the IRIS database is not part of a regulatory framework, there is no formal public notice and comment process in which regulated entities, such those in Louisville, can engage in order to provide direct input to any changes EPA might endeavor to make to IRIS values. LMAPCDB's proposed rule, therefore, excludes the facilities it is regulating as well as the LMAPCDB itself from a fundamental aspect of the regulatory process.

The proposed rule also establishes a cumulative cancer risk standard of 7.5 in 1 million for individual additional cancer risk from all applicable toxic air chemicals at all existing and new or modified sources at individual stationary sources. This risk level, for which no scientific basis was provided, might appear to be slightly high in the context of the maximum exposed individual exposure scenario considered in the rule. Based on EPA's current risk assessment practices in the air toxics program, however, the level in the proposed rule is overly conservative. In EPA's Report to Congress[1], EPA states that it does not consider individual additional cancer risk of 1 in a million as a "brightline" mandated level to protect public health, but rather as a trigger point to evaluate whether additional reductions are necessary to provide an ample margin of safety.

In setting residual risk standards, EPA considers a two-step process as established in the 1989 benzene NESHAP and endorsed by Congress in the 1990 Clean Air Act Amendments. This process first establishes a "safe" or "acceptable risk" level considering all health information, including estimating risk and uncertainty. EPA considers a maximum individual risk of approximately 1 in 10,000 for emissions of carcinogens from an individual source category as an acceptable risk level for this step. The second step establishes an emission standard that provides an "ample margin of safety" to protect public health, considering all health information, including the number of persons at risk levels higher than approximately 1 in a million, as well as other relevant factors such as costs, economic impacts, technological feasibility and any other parameters.

By using the benzene two-step process, EPA's goal is to provide maximum feasible protection against risk to health from hazardous air pollutants from a source category by protecting the greatest number of persons possible to an individual lifetime risk level no greater than approximately 1 in a million, and limiting to no greater than approximately 1 in 10,000 the estimated risk that a person living near a facility would have. By failing to consider the use of the benzene two-step process, or a range in risk values, LMAPCDB's proposed rule (1) implies to the surrounding community that a "brightline" risk level exists for a facility, and that any risk level above this value is unsafe; and (2) assumes

[1] EPA Residual Risk Report to Congress. EPA-453/R-99-001, March 1999.

facilities can easily reduce risk with no cost and economic impacts, and with no technological challenges.

ACC is concerned that LMAPCDB may have used the EPA National Air Toxics Assessment (NATA) as a source to highlight localized risk and then draw conclusions that focused all risk-reduction efforts on major stationary sources – which is at odds with the stated goals of NATA. NATA was developed to assess national and regional level risks from all potential sources of air toxics. EPA states on their NATA website that there are limitations in the emissions data and uncertainties in the dispersion modeling. EPA also cautions that the results should not be used to draw conclusions about local concentrations or risk. In fact, EPA's analysis of the 1996 NATA demonstrated that all industrial emissions combined amount to less than 10% of the remaining risks overall.[2] In addition, EPA attributed a considerable amount of risk to "background" as it could not determine the contributors to these emissions. In many instances, "background" concentrations, absent all other sources, could still pose unacceptable risks. LMAPCDB should evaluate sources of local risk, including individual personal sources (e.g., attached garages and open gas cans), prior to simply monitoring industrial sources and attributing all risk to the facilities. While the varying source contributions are likely to differ at the local level, EPA's analysis underscores that the major stationary sources are the least likely to be driving local or regional risks. EPA's analysis also highlights that continued ratcheting down on these major sources is unlikely to make a substantive reduction in either localized or national risk.

In closing and as stated above, ACC is concerned that LMAPCDB is moving forward with a rule that will have significant adverse economic impact on area business and will duplicate federal initiatives already in place to address the potential risk targeted by the rule. In this context, the ACC strongly encourages the LMAPCDB to carefully consider the overall source contributions to risks in the Louisville area and to make thoughtful decisions about reducing risks and addressing any potential health impacts. As indicated, in addition to the federal programs already in place, numerous control technology programs and a series of residual risk programs are being developed by EPA to address

[2] EPA Technology Transfer Network: http://www.epa.gov/ttn/atw/nata/

any remaining risks. As EPA has noted, most remaining risks are *not* driven by major stationary sources and while these sources may be an obvious place to start an analysis, a comprehensive review of all contributions to the problem in the community is necessary. Only then can one develop an effective and equitable program based on source contribution that will improve air quality and address remaining risks.

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